This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-75. (Canceled)

76. (Currently Amended) A method for prefetching data comprising:

prior to receiving a query for an attribute corresponding to an initial object in an object structure comprising a plurality of objects, creating a structure context description that identifies each object in the object structure wherein the structure context description is created from a state of an object related to the initial object, the state of the related object comprising a reference to the object structure;

associating the structure context description with each object in the object structure;

storing the structure context description in a physical storage system; and

upon receiving the query:

retrieving data corresponding to the attribute of the initial object;

returning the data corresponding to the attribute of the initial object to an ~~the~~ application;

using the structure context description to identify at least one other object in the object structure that has the attribute;

retrieving data corresponding to the attribute of the other objects in the object structure;

placing in cache the data corresponding to the attribute of the other objects in the object structure; and

upon receiving a request the attribute for one of the other objects, providing the requested attribute from the data stored in the cache, whereby the attribute is provided in less time than if the attribute were not cached.

77. (Previously Presented) The method of claim 76, wherein the physical storage system is at least one of memory of a client application program, memory allocated to a data storage system, and a table of a relational database.

78. (Previously Presented) The method of claim 76, comprising retrieving by an object repository the data corresponding to the attribute of the other objects in the object structure.

79-93. (Canceled)

94. (Previously Presented) The method of claim 76, wherein each object is an instance of a COM ("Component Object Model") class.

95. (Previously Presented) The method of claim 94, wherein the state of each object is organized according to at least one interface of a class associated with the object.

96. (Previously Presented) The method of claim 95, wherein the state of an object further comprises at least one collection and at least one attribute implemented by an interface of the associated class.

97. (Previously Presented) The method of claim 96, wherein the query comprises an application accessing a component of a state of an object.

98. (Previously Presented) The method of claim 97, wherein a component is one of a collection and a property of an interface associated with the object.

99-104. (Canceled)

105. (New) A computer-readable storage medium having stored thereon computer-executable instructions for performing a process comprising:

prior to receiving a query for an attribute corresponding to an initial object in an object structure comprising a plurality of objects, creating a structure context description that identifies each object in the object structure wherein the structure context description is created from a state of an object related to the initial object, the state of the related object comprising a reference to the object structure;

associating the structure context description with each object in the object structure;

storing the structure context description in a physical storage system; and

upon receiving the query:

retrieving data corresponding to the attribute of the initial object;

returning the data corresponding to the attribute of the initial object to an application;

using the structure context description to identify at least one other object in the object structure that has the attribute;

retrieving data corresponding to the attribute of the other objects in the object structure;

placing in cache the data corresponding to the attribute of the other objects in the object structure; and

upon receiving a request the attribute for one of the other objects, providing the requested attribute from the data stored in the cache, whereby the attribute is provided in less time than if the attribute were not cached.

106. (New) The computer-readable storage medium of claim 105, wherein the physical storage system is at least one of memory of a client application program, memory allocated to a data storage system, and a table of a relational database.

107. (New) The computer-readable storage medium of claim 105, wherein the process comprises retrieving by an object repository the data corresponding to the attribute of the other objects in the object structure.

108. (New) The computer-readable storage medium of claim 105, wherein each object is an instance of a COM ("Component Object Model") class.

109. (New) The computer-readable storage medium of claim 108, wherein the state of each object is organized according to at least one interface of a class associated with the object.

110. (New) The computer-readable storage medium of claim 109, wherein the state of an object further comprises at least one collection and at least one attribute implemented by an interface of the associated class.

111. (New) The computer-readable storage medium of claim 110, wherein the query comprises an application accessing a component of a state of an object.

112. (New) The computer-readable storage medium of claim 111, wherein a component is one of a collection and a property of an interface associated with the object.

113. (New) A system for prefetching data comprising:

a processor operative to execute computer executable instructions; and

memory having stored therein computer executable instructions for performing a process comprising:

prior to receiving a query for an attribute corresponding to an initial object in an object structure comprising a plurality of objects, creating a structure context description that identifies each object in the object structure wherein the structure context description is created from a state of an object related to the initial object, the state of the related object comprising a reference to the object structure;

associating the structure context description with each object in the object structure;

storing the structure context description in a physical storage system; and

upon receiving the query:

retrieving data corresponding to the attribute of the initial object;

returning the data corresponding to the attribute of the initial object to an application;

using the structure context description to identify at least one other object in the object structure that has the attribute;

retrieving data corresponding to the attribute of the other objects in the object structure;

placing in cache the data corresponding to the attribute of the other objects in the object structure; and

upon receiving a request the attribute for one of the other objects, providing the requested attribute from the data stored in the cache, whereby the attribute is provided in less time than if the attribute were not cached.

114. (New) The system of claim 113, wherein the physical storage system is at least one of memory of a client application program, memory allocated to a data storage system, and a table of a relational database.

115. (New) The system of claim 113, wherein the process comprises retrieving by an object repository the data corresponding to the attribute of the other objects in the object structure.

116. (New) The system of claim 113, wherein each object is an instance of a COM ("Component Object Model") class.

117. (New) The system of claim 116, wherein the state of each object is organized according to at least one interface of a class associated with the object.

118. (New) The system of claim 117, wherein the state of an object further comprises at least one collection and at least one attribute implemented by an interface of the associated class.

119. (New) The system of claim 118, wherein the query comprises an application accessing a component of a state of an object.

120. (New) The system of claim 119, wherein a component is one of a collection and a property of an interface associated with the object.